

In the Claims

We claim:

1. (Cancelled)
2. (Cancelled)
3. (Cancelled)
4. (Cancelled)
5. (Cancelled)
6. (Cancelled)
7. (Cancelled)
8. (Cancelled)
9. (Cancelled)

10. (Currently Amended) The brake system as recited in claim [9] 11 wherein said plurality of radial ribs prevent said base member of said boot from engaging said wall to assure said flow path remains a substantially same size during the communication of air from the engine compartment to said bore of said valve body.

11. (New) A brake system having a boost unit that is secured to a panel of a vehicle that separates an engine compartment from a passenger compartment, said boost unit having a housing that retains a valve body with a cylindrical projection that extends through a first opening in said housing into the passenger compartment, a boot located on said panel that extends from said opening and is secured to an input rod, a valve located within a bore of said valve body and responsive to an input force applied to the input rod to selectively communicate air from said engine compartment to a chamber in said boost unit by way of said bore for creating a pressure differential across a movable wall in the boost unit, said pressure differential acting on said movable wall to develop an output force to effect a brake application, said brake system being characterized by a spacer located between said panel and said boost unit for off-setting said boost unit from said panel into said engine compartment; said spacer being defined by a body having a front face and a rear face created by a first side, a second side, a top side, and a bottom side, said body having a plurality of circular bearing surfaces located at an intersection of said sides with an axial bore that extends through each bearing surface for receiving a mounting bolt that extends from said boost unit, a plurality of tabs that are

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located in said axial bore and directed toward the axis of said axial bore and said front face; and a wall located adjacent said front face that extends between said first side, said second side, said top side, and said bottom side, said wall having a second axial opening with a flange that extends to a height that is parallel with said front face and a plurality of ribs that extend from said flange toward said sides to define a plurality of radial slots, said body having an axial slot that extend from said front face to said rear face and a peripheral slot adjacent said rear wall through which said axial slot is connected to said engine compartment, said tabs on said body on engaging a corresponding mounting stud on said boost unit radially flexing outwardly to only thereafter allow said rear face of said spacer to be moved into engagement with said housing of said boost unit, each of said plurality of tabs being located in an axial bore at a point that is mid-way between said front face and said rear face and in radially flexing outwardly never extend past said front face, said plurality of tabs engaging a corresponding mounting stud to retain said spacer on said boost unit prior to the attachment of fasteners on said mounting studs, said boot being defined by a base member that is joined to an end member by an accordion shaped body, said accordion shaped body surrounding said cylindrical projection of said valve body while said input rod extends through and is sealed with respect to said end member, said base member engaging said front face of said spacer and being compressed by said first side, second side, said top side and said bottom side of said spacer body when fasteners are connected to the mounting bolts such that unrestricted communication of air from the engine compartment to said bore of said valve body occurs along a flow path defined by said peripheral slot, axial slot, plurality of radial slots in the spacer and an axial space between said accordion shaped body of said boot and said cylindrical projection of said valve body, said plurality of tabs assure that said front face is adjacent said base member of said boot in the establishment of said flow paths while said plurality of radial ribs prevent said base member of said boot from engaging said wall to assure said flow path remains a substantially same size during the communication of air from the engine compartment to said bore of said valve body, said first side, said second side and said top side being further characterized by parallel walls with successive rectangular openings therein to provide support for retaining said boost unit on

said panel when said fasteners are attached to said mounting studs and wherein said bottom side is arcuate such that said peripheral slot has a point that is lower than the first and second sides of said body of said spacer to allow any water that may be present in said spacer to be communicated to said engine compartment area rather than effect the flow of air through the flow path.

12.(New) A brake system having a boost unit that is secured to a panel of a vehicle that separates an engine compartment from a passenger compartment, said boost unit having a housing that retains a valve body with a cylindrical projection that extends through a first opening in said housing into the passenger compartment, a boot located on said panel that extends from said opening and is secured to an input rod, a valve located within a bore of said valve body that is responsive to an input force applied to the input rod to selectively communicate air from said engine compartment to a chamber in said boost unit by way of said bore for creating a pressure differential across a movable wall in the boost unit, said pressure differential acting on said movable wall to develop an output force to effect a brake application, said brake system being characterized by a spacer located between said panel and said boost unit for off-setting said boost unit from said panel into said engine compartment, said spacer being defined by a body having a front face and a rear face created by a first side, a second side, a top side, and a bottom side, said body having a plurality of circular bearing surfaces located at an intersection of said sides with an axial bore that extends through each bearing surface for receiving a mounting bolt that extends from said boost unit, a plurality of tabs that are located in said axial bore and directed toward the axis of said axial bore and said front face; and a wall located adjacent said front face that extends between said first side, said second side, said top side, and said bottom side, said wall having a second axial opening with a flange that extends to a height that is parallel with said front face and a plurality of ribs that extend from said flange toward said sides to define a plurality of radial slots, said body having an axial slot that extend from said front face to said rear face and a peripheral slot adjacent said rear wall through which said axial slot is connected to said engine compartment, said tabs on said body on engaging a corresponding mounting stud on said boost unit radially flexing outwardly to only then thereafter allow

said rear face of said spacer to be moved into engagement with said housing of said boost unit, said boot being defined by a base member that is joined to an end member by an accordion shaped body, said accordion shaped body surrounding said cylindrical projection of said valve body while said input rod extends through and is sealed with respect to said end member, said base member engaging said front face of said spacer and being compressed by said first side, second side, said top side and said bottom side of said spacer body when fasteners are connected to the mounting bolts such that communication of air from the engine compartment to said bore of said valve body occurs along a flow path defined by said peripheral slot, axial slot, plurality of radial slots in the spacer and an axial space between said accordion shaped body of said boot and said cylindrical projection of said valve body to assure that said front face is adjacent said base member of said boot in the establishment of said flow paths, said plurality of radial ribs on said wall preventing said base member of said boot from engaging said wall to assure said flow path defined by said plurality of radial slots remains a substantially same size during the communication of air from the engine compartment to said bore of said valve body.

13.(New) The brake system as recited in claim 12 wherein said first side, said second side and said top side are further characterized by parallel walls with successive rectangular openings to provide support for retaining said boost unit on said panel when said fasteners are attached to said mounting studs.

14.(New) The brake system as recited in claim 13 wherein said bottom side is arcuate and said peripheral slot has a point that is lower than the first and second sides of said body of said spacer to allow any water that may be present in said spacer to be communicated to said engine compartment area rather than effect the flow of air through the flow path.